Subject: Trouble reading unformatted f77 (unix) integers? Posted by Brett Hennig on Wed, 10 May 1995 07:00:00 GMT

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Here's the problem:
The F77 code:
     open(unit=51,name='test1.dat',status='unknown',form='unforma tted')
     write(51)1,2,3
     close(51)
     end
The idl code(that doesn't work):
openr,n,'test1.dat',/get_lun,/f77_unformatted
x=0 & y=0 & z=0
readu,n,x,y,z
                            2
print, x, y, z \longrightarrow 1
                      0
free lun,n
end
Code that does:
openr,n,'test1.dat',/get lun,/f77 unformatted
x=0 & y=0 & z=0 & dum1=0 & dum2=0
readu,n,x,dum1,y,dum2,z
print,x,dum1,y,dum2,z \rightarrow 1
                                         2
                                                     3
                                               0
free_lun,n
end
is idl not interpreting the input correctly? or..??
```

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thanks to davidf@alpha.pr1.k12.co.us (David Fanning) for replying. it was another easy problem:

The problem here is that IDL integers (x=0) are two byte integers and your Fortran integers are four byte integers. Initialize your variables like this:

x=0L & y=0L & z=0L and it worked!

Subject: Re: Trouble reading unformatted f77 (unix) integers?

Posted by bowman on Wed, 10 May 1995 07:00:00 GMT

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In article <3oqmh1\$nb6@post.gsfc.nasa.gov>, thompson@orpheus.nascom.nasa.gov (William Thompson) wrote:

- > Your problem is very simple. The default integer data type in FORTRAN takes up
- > four bytes (INTEGER*4). In IDL parlance, this is known as a long integer. The
- > default IDL integer type is a short integer which only takes up two bytes.

Having run into a number of gotchas with short integers (including this one), I do wish there was a way to make LONG the default integer type in IDL.

Ken Bowman

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Subject: Re: Trouble reading unformatted f77 (unix) integers? Posted by ec10576 on Wed, 10 May 1995 07:00:00 GMT View Forum Message <> Reply to Message

I have experienced similar problems, in particular when I try to read integers. My guess has been that it is confused about reading short vs. long integers, but I would love to hear something more definitive.

-Elaine Chapin

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